DEPARTMENT OF ENERGY

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Consumption higher in first half year

Total Energy

Substantial weather effect

Total inland energy consumption on a primary fuel input basis during the first half of the year was just under 175 mtce, an increase of 3.3 per cent on the corresponding period of 1976. Coal consumption rose by 3.3 per cent and natural gas and nuclear electricity by 7.5 and 19 per cent respectively, but petroleum deliveries were only marginally above last year's level.

During the April to June quarter, total consumption was 5.1 per cent greater than in the comparable quarter of 1976, but this was largely due to the much colder weather this year. After seasonal adjustment and allowance for temperature effects, the increase was almost halved to 2.8 per cent with coal consumption 1.2 per cent and petroleum 0.3 per cent lower than a year previously.

Coal

Deep-mined output and productivity decline

Output of deep-mined coal during the three month period May to July was 2.5 per cent lower than during the corresponding period of 1976. Opencast production, in contrast, rose by 19 per cent and the additional contribution from this source lifted total production to within 0.3 per cent of last year's figure.

Total inland consumption of coal during the period rose by 1.6 per cent with power station consumption higher by 6.3 per cent and disposals of house coal and anthracite up by 6.8 and 9.3 per cent respectively. Consumption at coke ovens fell by over 10 per cent and disposals to industry were 7.7 per cent lower than a year ago. Total coal stocks rose during July by 700,000 tons to just under 29.5 million tons, but this was 3.8 million tons lower than at the same time last year when stocks were unusually high.

Productivity as measured by output per manshift overall continues to be at a low level. In six of the seven months of the year so far, productivity has been lower than in any year since 1970 (discounting the two strike-affected years of 1972 and 1974).

Gas

Big rise in recent demand

Total gas sent out during the three month period May to July was 12.4 per cent higher than in the corresponding period of 1976. The increased demand was largely attributable to the comparatively cool weather this year, June and July in particular, each being very much colder than a year ago.

Electricity

Continued rise in coal burn

Total electricity supplied during the second quarter of 1977 was 5.4 per cent higher than in the comparable quarter of 1976, much of the

increased demand being stimulated by the cooler conditions prevailing this year.

Fuel used for generation during the period was also higher by 5.4 per cent with coal consumption rising by 1.3 million tons, 7.7 per cent above last year's level. Measured in terms of fossil fuel input the nuclear contribution rose by 16 per cent while oil use marginally declined.

Petroleum

North Sea contribution over one third

During the first half of 1977 over 17 million tonnes of indigenous oil from the North Sea were received at refineries, accounting for 35 per cent of total receipts compared with 7 per cent during the first half of 1976.

Refinery output of products during the first half year was 1.3 per cent below last year's level with all products sharing the decline except fuel oil and lubricating oil which rose by 1.1 and 9.3 per cent respectively.

Total inland deliveries of products during the second quarter were 2.6 per cent higher than in the comparable period of 1976. Deliveries of heating oils were stimulated by the cooler weather, gas/diesel oil rising by over 10 per cent and fuel oil also responding with modest increases during May and June.

Value of fuel imports and exports

Crude import bill still large

The final table shows the value of foreign trade in fuels. During the second quarter of the year the total value of crude oil imports fell by only 0.7 per cent compared with a year ago, despite a reduction in volume of over 15 per cent. This is a reflection of the OPEC price rises of January and the earlier decline in the sterling exchange rate. In the second quarter the average c.i.f. price of imported crude oil rose to £60 per ton, compared with £58.8 in the first quarter of the year and £51.2 in the second quarter of 1976.

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Figures for the latest periods and the corresponding averages or totals are provisional and are liable to subsequent revision.

The figures have not been adjusted for temperature or seasonal factors except where noted in Table 1. Monthly figures relate to four week periods except where otherwise indicated.

Percentage changes relate to the corresponding period a year ago. They are calculated from unrounded figures but are shown only as (+) or (-) when the percentage change is very large. All figures relate to the United Kingdom unless otherwise indicated.

Explanatory notes on the definitions and concepts used in the tables and on the relationship between some of the main series are given in the Supplement to the March 1976 issue of *Energy Trends* and on the first page of the August 1976 issue. Extra copies of that Supplement may be obtained from the Department of Energy.

Symbols used in the tables

- . . not available.
- nil or less than half the final digit shown.
- * five-week period.
- p provisional.

Total energy

TABLE 1. Inland energy consumption: primary fuel input basis

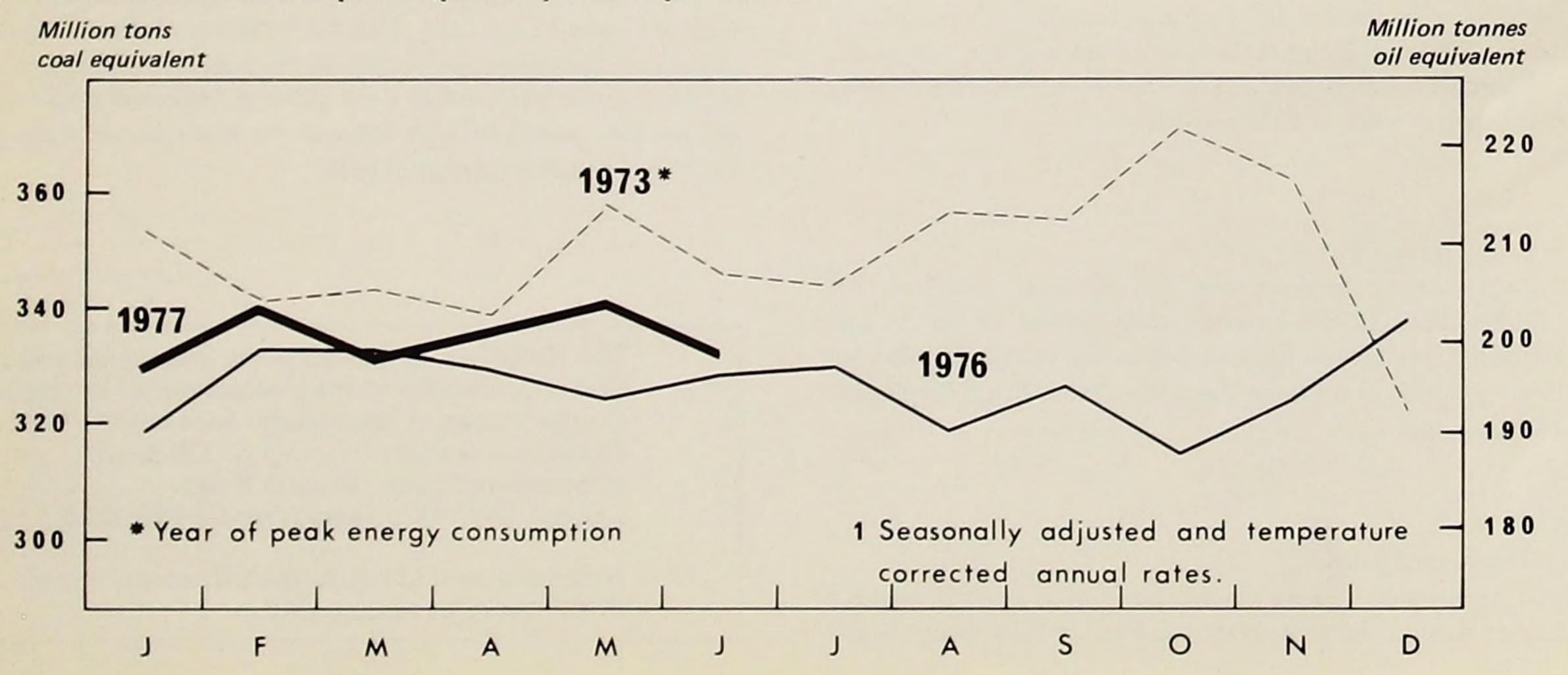
TABLE I. Imiai	id ellergy											
	Total	Coal ¹	Petroleum ²	Natural ³ gas		Hydro- electricity	Total	Coal ¹	Petroleum ²	Natural ³ gas	Nuclear electricity	Hydro- electricity
	Million to	ns of coal o	r coal equiva	lent			Million me	tric tonnes	of oil or oil e	quivalent		
1973	347.9	130.8	161.6	43.6	9.9	2.0	207.9	78.2	96.6	26.0	5.9	1.2
1974	332.2	116.0	150.1	52.1	11.9	2.1	198.6	69.3	89.7	31.2	7.1	1.3
1975	319.7	118.1	134.4	54.5	10.8	1.9	191.1	70.6	80.3	32.6	6.4	1.2
1976	324.7	120.1	132.1	57.9	12.7	1.9	194.0	71.8	78.9	34.6	7.6	1.1
Per cent change	+1.5	+1.7	-1.7	+6.1	+17.8	-4.4	+1.5	+1.7	-1.7	+6.1	+17.8	-4.4
1976 Jan-Jun	169.2	62.7	68.2	31.0	6.1	1.2	101.1	37.5	40.8	18.5	3.6	0.7
1977 Jan-Jun p	174.7	64.8	68.3	33.3	7.3	1.0	104.4	38.7	40.8	19.9	4.4	0.6
Per cent change	+3.3	+3.3	+0.2	+7.5	+19.2	-13.0	+3.3	+3.3	+0.2	+7.5	+19.2	-13.0
1976 Apr	26.0	9.0	10.8	5.0	1.0	0.2	15.5	5.4	6.4	3.0	0.6	0.1
May	23.0	9.0	9.0	4.0	0.9	0.1	13.7	5.4	5.3	2.4	0.5	0.1
Jun*	25.5	10.1	11.4	2.9	1.0	0.1	15.2	6.0	6.8	1.7	0.6	0.1
Total	74.5	28.1	31.2	11.9	2.9	0.4	44.4	16.8	18.5	7.1	1.7	0.3
1977 Apr	27.2	9.9	10.5	5.5	1.1	0.2	16.2	5.9	6.2	3.3	0.7	0.1
May	24.7	9.4	9.6	4.6	1.0	0.1	14.8	5.6	5.8	2.7	0,6	0.1
Jun p*	26.5	10.0	11.5	3.7	1.2	0.1	15.8	6.0	6.8	2.2	0.7	0.1
Total	78.4	29.3	31.6	13.8	3.3	0.4	46.8	17.5	18.8	8.2	2.0	0.3
Per cent change	+5.1	+4.0	+1.5	+15.1	+14.9	+0.8	+5.1	+4.0	+1.5	+15.1	+14.9	+0.8

Seasonally adjusted and temperature corrected⁴ (annual rates)

							_					
1976 Jan-Jun	328.2	122.6	134.5	57.4	11.5	2.2	196.2	72.3	80.4	34.3	6.9	1.3
1977 Jan-Jun p	335.0	123.2	134.0	61.8	13.9	2.1	200.2	73.6	80.1	36.9	8.3	1.3
Per cent change	+2.1	+0.4	-0.4	+7.8	+20.5	-3.5	+2.1	+0.4	-0.4	+7.8	+20.5	-3.5
1976 Apr	329.1	118.7	137.8	57.6	12.1	2.9	196.6	71.0	82.3	34.1	7.2	1.7
May	323.9	120.5	134.0	54.8	12.2	2.4	193.6	72.0	80.1	32.7	7.3	1.5
Jun*	328.2	122.9	139.4	51.0	12.6	2.3	196.1	73.4	33.3	30.5	7.5	1.4
Average	327.1	120.8	137.3	54.2	12.3	2.5	195.5	72.2	82.0	32.4	7.4	1.5
1977 Apr	335.6	124.2	133.2	62.0	13.4	2.8	200.5	74.2	79.6	37.0	8.0	1.7
May	340.5	121.5	140.4	61.1	14.1	3.4	203.5	72.6	83.9	36.5	8.5	2.0
Jun p*	333.4	113.9	137.0	65.0	15.4	2.1	199.3	68.1	81.9	38.9	9.2	1.2
Average	336.3	119.4	136.9	62.9	14.4	2.7	200.0	71.4	81.8	37.6	8.6	1.6
Per cent change	+2.8	-1.2	-0.3	+16.0	+17.0	+5.6	+2.8	-1.2	-0.3	+16.0	+17.0	+5.6

^{1.} Consumption by fuel producers plus colliery disposals to final users, plus (for annual figures only) net foreign trade and stock change in other solid fuels. 2. Refinery throughput of crude oil, plus net foreign trade and stock change in petroleum products, less deliveries of non energy products. 3. Excluding gas flared or reinjected. 4. Only coal and petroleum are temperature corrected.

Energy: Total inland consumption (primary fuel input basis)1



				1975				1976				1977р	
			Per						200	2-4	1+h		Per ¹
	1975	1976	cent change	1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	cent change
PRIMARY FUELS AND EQUI	VALENT	S:											
Production of primary fuels	21 420	20 166	40	0.402	7,904	6,602	8,442	8,006	7,635	6,378	8,147	7,567	-5.5
Coal Petroleum ²	31,430 665	30,166 5,206	-4.0 (+)	8,482 56	57	137	415	574	1,020	1,335	2,277	3,301	(+)
Natural gas ³	13,578	14,379	+5.9	4,193	2,980	2,191	4,214	4,727	2,962	2,173	4,517	4,910	+3.9
Primary electricity	2,982	3,411	+14.4	944	617	580	841	926	786	770	929	1,070	+15.6
Total	48,655	53,162	+9.3	13,675	11,558	9,510	13,912	14,233		10,656	15,870	16,848	
Arrivals. Petroleum Other	44,216 1,616	43,174 1,183	-2.4 -26.8	11,378 389	11,200 417	10,521 380	11,117 430	10,992 351	10,949 336	10,160 270	11,073 226	9,611	-12.6 -45.0
Shipments	7,243	9,176	+26.7	1,730	1,638	1,993	1,882	1,745	2,068	2,507	2,856	3,103	
Bunkers	1,418	1,468	+3.5	375	345	354	344	371	346	381	370	319	-14.0
Stock change Solid fuels	-2,576	-634		+103	-1,085	-891	-703	+312	-820	-388	+262	+1,193	
Crude petroleum	+475	-378		+425	-248	+220	+78		-196	-25	-511	+375	
Petroleum products	+978	+ 240	••	+754	+20	-503	+707	+648	-431	-367	+390	+560	
Non energy use Statistical difference ⁶	4,106 -176	4,448 +54	+8.3	1,055 -168	956 +17	960 -13	1,135 -12	1,138 +58	1,111 -23	1,159 -2	1,040 +21	929 -301	-18.4
Total primary ⁷	80,421	81,709	+1.6	23,396		15,917	22,168	23,694	18,693	16,257	23,065	24,128	+1.8
energy input	24 545	24,380	-0.7	6,995	5,693	4,954	6,905	6,913	5,596	4,905	6,966	7,254	+4.9
Conversion losses etc. ⁸ FINAL CONSUMPTION BY U	24,545 SED:	24,360	-0.7	0,555	3,055	4,554	0,505	0,510	0,000	4,500	0,000		
Iron and steel industry	SEN.											!	
Coal	72	66	-8.3	25	18	10	19	23	14	9	20	23	-
Other solid fuel ⁹	2,374	2,723	+14.7	746	575	482 76	571 92	631	719 109	670 97	703	655 95	+3.8
Other coal-derived fuels 10	372 371	401-	+7.8	107 101	97 91	79	100	98 108	112	99	119	128	+18.5
Electricity	344	395	+14.8	94	84	75	91	100	96	90	109	102	+2.0
Petroleum	1,357	1,279	-5.7	449	334	244	330	354	306	273	346	351	-0.8
Total	4,890	5,302	+8.4	1,522	1,199	966	1,203	1,314	1,356	1,238	1,394	1,354	+3.0
Other industries													
Coal	2,458	2,277	-7.4	660	613	528	657	547 38	564	470 27	696	617 39	+12.8
Other solid fuel ⁹ Other coal-derived fuels ¹⁰	164 78	126 76	-23.2 -2.6	17	23	22	30 16	13	24	25	15	17	+30.8
Gas 1 1	4,701	5,241	+11.5	1,295	1,091	1,007	1,308	1,456	1,236	1,083	1,466	1,431	-1.7
Electricity	2,228	2,364	+6.1	588	540	508	592	617	563	546	638	646	+4.7
Petroleum	7,434	7,441	+0.1	2,140	1,770	1,300	2,224	2,255	1,696	1,400	2,090	2,256	_
Total	17,063	17,525	+2.7	4,747	4,084	3,405	4,827	4,926	4,106	3,551	4,942	5,006	+1.6
Transport sector Coal and other solid fuel	19	21	+10.5	6	3	3	7	7	4	2	8	6	-14.3
Electricity	99	98	+1.0	26	25	23	25	26	24	22	26	27	+3.8
Petroleum	12,143	12,597	+3.7	2,771	3,104	3,225	3,043	2,889	3,198	3,333	3,177	2,988	+3.4
Total	12,261	12,716	+3.7	2,803	3,132	3,251	3,075	2,922	3,226	3,357	3,211	3,021	+3.4
Domestic sector	0.004	0.440	7.0	1 010	000	600	766	000	765	624	012	051	_07
Coal	3,381 962	3,143 869	-7.0 -9.7	1,013 270	903	699 260	766	932 277	765 196	634 208	188	851 231	-8.7 -16.6
Other solid fuel Gas 1 1	5,891	6,194	+5.1	2,329	1,119	615	1,828		1,055	686	2,050	2,412	+0.4
Electricity	3,045	2,905	-4.6	1,041	681	485	838	993	585	464	863	972	-2.1
Petroleum	1,434	1,435	-0.1	473	306	194	461	519	268	176	472	513	-1.2
Total	14,713	14,546	-1.1	5,126	3,240	2,253	4,094	5,124	2,869	2,168	4,385	4,979	-2.8
Other final users 12	490	516	+5.3	129	123	78	160	172	113	73	158	165	-4.1
Other solid fuel ⁹	219	166	-24.2	64	49	63	43	51	44	37	34	52	+2.0
Gas ¹¹	1,347	1,521	+12.9	472	310	171	394	571	317	169	464	561	-1.8
Electricity	1,546	1,596 3,441	+3.2	462 1,081	347 764	300 474	1,028	478 1,223	345 721	308 451	1,046	1,239	+4.0
Petroleum	3,347												
Total final wears	6,949	7,240	+4.2	2,208	+	1,086	2,062		1,540	1,038	2,167	2,514 16,874	+0.8
Total final users	55,876	57,329	+2.6	16,406	13,248	10,961	15,261	16,781	13,097	11,352	10,099	10,874	+0.6
FINAL CONSUMPTION BY F		6.000	6.2	1 1 922	I 1.660	1 1 210	1,609	1,681	1,460	1,188	1,693	1,662	-1.1
Coal Coal fuel 9	6,420 3,719	6,022 3,885	-6.2 +4.5	1,833	1,660	1,318	845	997	983	942	963	977	-2.0
Other solid fuel Other coal-derived fuels 10			+6.0	124	120	98	108	111	132	122	112		
Gas 1 1	12,310		+8.8	4,197	2,611	1,872	3,630	4,538	2,720	2,037	4,099	4,532	
Electricity	7,262	7,358	+1.3	2,211	1,677	1,391	1,983	2,214	1,613	1,430	2,101	2,244	
Petroleum	25,715			6,914	6,278	5,437	7,086	7,240		5,633	7,131	7,347	
Total all fuels	55,876	57,329	+2.6	16,406	13,248	10,961	15,261	16,781	13,097	11,352	16,099	16,874	+0.6

^{1.} Per cent change on the corresponding period of the previous year. 2. Crude petroleum and natural gas liquids. 3. Excluding gas flared or reinjected.
4. Crude petroleum, process oils and petroleum products. 5. Stock fall (+) stock rise (—). 6. Supply greater than recorded demand (—). 7. Thermal equivalent of total inland energy consumption in Table 1. A more detailed analysis of the annual figures is shown in the Digest of United Kingdom Energy Statistics 1977 Tables 8 and 11. 8. Losses in conversion and distribution and used by fuel industries. 9. Coke and other manufactured solid fuels.
10. Coke oven gas, creosote/pitch mixtures and other liquid fuels derived from coal. 11. Natural gas supplied direct, and town gas. 12. Mainly public administration, commerce and agriculture.

Thousand tons

		Production						Tonnage lost	(deep-mined) ³
	Net inland supply	Total ¹	Deep-mined	Opencast	Net Imports	Imports ²	Exports ²	Recognised holidays and rest days	Disputes
1973	128,904	129,906	118,140	9,964	-1,002	1,649	2,651	10,313	5,569
1974	110,362	108,707	98,413	9,085	+1,655	3,491	1,836	10,352	15,996
1975	129,505	126,650	115,557	10,249	+2,855	5,003	2,148	12,105	347
1976	123,224	121,845	108,523	11,755	+1,379	2,792	1,413	12,150	1,140
Per cent change	-4.9	-3.8	-6.1	+14.7	-51.7	-44.2	-34.2	+0.4	(+)
1976 Jan-Jul	72,740	71,588	63,987	6,666	+1,152	1,937	785	6,767	415
1977 Jan-Jul p	69,855	69,889	62,000	7,200	-34	1,161	1,195	7,366	478
Per cent change	-4.0	-2.4	-3.1	+8.0	(-)	-40.1	+52.2	+8.9	+15.2
1976 May	10,833	10,544	9,459	997	+289	387	98	46	66
Jun*	10,743	10,616	9,257	1,162	+127	224	97	2,116	31
Jul	8,515	8,413	7,394	901	+102	276	174	1,585	35
Total	30,091	29,573	26,110	3,060	+518	887	369	3,747	132
1977 May	10,393	10,409	9,236	1,104	-16	156	172	73	92
Jun*	10,408	10,423	8,909	1,386	-15	164	179	2,260	90
Jul p	8,752	8,657	7,309	1,151	+95	290	195	1,567	52
Total	29,553	29,489	25,454	3,641	+64	610	546	3,900	234
Per cent change	-1.8	-0.3	-2.5	+19.0	-87.6	-31.2	+48.0	+4.1	+77.3

^{1.} Includes an estimate for slurry, etc., recovered and disposed of otherwise than by the National Coal Board.

TABLE 4. Inland consumption of coal

Thousand tons

		Fuel produce	ers				Final users ¹			
		Primary	Secondary				Colliery disp	osals		
	Total					Other ³		Domestic ⁵		
	inland	Collieries	Power stations ²	Coke	Gas works	conversion	Industry ⁴	House Coal ⁶	Other 7	Other ⁸
1973	131,288	1,359	75,628	21,543	504	3,550	11,890	12,519	1,755	2,540
1974	116,043	1,236	65,967	18,169	105	3,728	10,902	11,848	1,623	2,465
1975	120,303	1,218	73,391	18,783	9	3,999	9,532	9,844	1,609	1,918
1976	121,665	1,115	76,589	19,095	8	3,351	8,828	9,377	1,289	2,013
Per cent change	+1.1	-8.5	+4.4	+1.7	-11.1	-16.2	-7.4	-4.7	-19.9	+5.0
1976 Jan-Jul	70,448	672	44,169	10,933	5	2,104	4,945	5,688	753	1,179
1977 Jan-Jul p	72,706	677	47,312	10,446	5	1,696	5,071	5,554	752	1,193
Per cent change	+3.2	+0.7	+7.1	-4.5	+4.3	-19.4	+2.5	-2.4	-0.1	+1.2
1976 May	8,987	88	5,336	1,506	-	283	759	775	98	142
Jun*	10,137	90	6,058	1,865	-	346	779	768	102	129
Jul	7,736	68	4,579	1,474	1	249	619	567	111	68
Total	26,860	246	15,973	4,845	1	878	2,157	2,110	311	339
1977 May	9,378	102	5,961	1,336	-	236	684	802	108	149
Jun*	10,017	106	6,228	1,652	1	286	703	786	112	143
Jul p	7,908	77	4,797	1,350	_	214	604	665	120	81
Total	27,303	285	16,986	4,338	1	736	1,991	2,253	340	373
Per cent change	+1.6	+15.9	+6.3	-10.5	+15.4	-16.2	-7.7	+6.8	+9.3	+10.0

^{1.} Disposals by collieries and opencast sites. 2. Public supply and railway and transport power stations. 3. Low temperature carbonisation & patent fuel plants. 4. Prior to October 1973 the figures relate to actual consumption. 5. Prior to April 1973 the figures relate to merchants' disposals to the domestic market. 6. Including miners' coal. 7. Anthracite, dry steam coal and imported naturally smokeless fuels. 8. Mainly public administration & commerce.

TABLE 5. Stocks of coal¹ at end of period: Great Britain

Thousand tons

		Distributed					Undistributed		
	Total	Total distributed stocks	Power	Coke	Gas	Other	Total undistributed stocks	Collieries	Opencast sites and central stocking grounds
1971	28,211	17,982	15,712	1,777	72	421	10,229	6,973	3,256
1972	29,979	19,045	16,791	1,890	50	314	10,934	7,558	3,376
1973	27,445	16,766	14,537	1,937	27	265	10,679	7,529	3,150
1974	21,462	15,577	13,414	1,822	3	338	5,885	3,946	1,939
1975	30,666	20,216	17,668	2,296	2	250	10,450	8,767	1,683
1976	32,592	22,102	19,288	2,642	2	170	10,490	9,148	1,342
1976 May	31,966	20,440	17,572	2,627	1	240	11,526	10,065	1,451
Jun	32,566	21,192	18,410	2,541	1	240	11,374	9,824	1,550
Jul	33,254	22,230	19,450	2,539	1	240	11,024	9,475	1,549
1977 May	28,264	18,792	16,273	2,338	1	180	9,472	8,267	1,205
Jun	28,762	19,484	17,066	2,237	1	180	9,278	7,879	1,399
Jul p	29,480	20,514	18,045	2,268	1	200	8,966	7,480	1,486
Absolute change:									
In latest month	+718	+1,030	+979	+31	_	+20	-312	-399	+87
On a year ago	-3,774	-1,716	-1,405	-271	-	-40	-2,058	-1,995	-63

^{1.} Excluding distributed stocks held in merchants' yards, etc., mainly for the domestic market, and stocks held by the industrial sector.

^{2.} As recorded in the "Overseas Trade Statistics of the United Kingdom". 3. NCB mines only.

TABLE 6. Colliery manpower and productivity at NCB mines

	Wage earners colliery book		Recruitment	Wastage	Absence perce	entage ²		Average output per manshift ³		
	Total	Underground			Total	Voluntary	Involuntary	Overall	At the face	
	Thousands		Number		Per cent			Cwt.		
1971	279	218	28,010	32,309	18.1	4.4	13.7	43,94	143.08	
1972	266	210	13,255	26,114	16.6	3.9	12.7	43.60	144.35	
1973	245	193	17,402	37,961	18.0	4.1	13.9	45.00	150.00	
1974	246	194	26,436	25,133	16.3	4:1	12.2	42.83		
1975	245	194	21,347	22,451	16.2	4.0	12.2	44.92	155.85	
1976	241	192	17,061	21,239	17.4	3.7	13.7	43.81	152.59	
1976 May	243	193	1,422	1,496	15.1	3.2	11.9	45.44	156.20	
Jun*	243	193	1,573	2,012	15.4	3.1	12.3	42.56	151.29	
Jul	242	192	999	1,777	16.3	3.4	12.9	40.62	144.14	
1977 May	244	194	2,850	2,076	16.2	3.3	12.9	44.97	158.47	
Jun*	244	194	2,821	3,002	16.0	3.1	12.9	41.72	153.45	
Jul p	244	194	2,140	1,899	16.7	3.4	13.3	40.27	146.10	

^{1.} At end of period. 2. The definition was changed from 1973. 3. Excluding capital working and tip coal.

Gas

TABLE 7. Sources of supply and send-out by the public gas supply system

	Natural gas sup	ply		Other fuel used		Gas sent out		
	Total	Source ¹						Natural gas for
	into	Indigenous	Imported	Coal	Oil ²	Total	Town gas	direct
	Million therms			Thousand tons		Million therms		
1973	10,916	10,639	277	503	2,286	11,620	2,434	9,186
1974	13,102	12,861	241	105	1,256	13,451	1,598	11,853
1975	13,692	13,367	325	9	579	13,822	752	13,070
1976	14,420	14,030	390	8	241	14,445	226	14,219
Per cent change	+5.3	+5.0	+20.0	-11.1	-58.4	+4.5	-69.9	+8.8
1976 Jan-Jul	8,495	8,244	251	5	153	8,500	174	8,326
1977 Jan-Jul p	9,096	8,934	162	5	89	9,074	57	9,017
Per cent change	+7.1	+8.4	-35.5	+4.4	-41.8	+6.8	-67.2	+8.3
1976 May	1,001	968	33	1	16	995	16	979
Jun*	897	868	29	_	9	896	11	885
Jul	596	571	25	_	9	605	6	599
Total	2,494	2,407	87	1	34	2,496	33	2,463
1977 May	1,062	1,039	23	-	8	1,049	6	1,043
Jun*	1,069	1,036	33	1	6	1,064	6	1,058
Jul p	700	674	26	-	5	693	3	690
Total	2,831	2,749	82	1	19	2,806	15	2,791
Per cent change	+13.5	+14.2	-5.7	-	-44.1	+12.4	-54.5	+13.3

^{1.} Figures differ from production and imports respectively because of stock changes and small quantities not entering the public supply system.

TABLE 8. Sales of gas by the public supply system

Million therms

	Total	Power stations ¹	Iron and steel industry	Other industries	Domestic	Other ²
1971	7,520	263	343	2,118	3,930	866
1972	9,787	630	437	3,215	4,509	996
1973	10,729	285	396	4,150	4,815	1,083
1974	12,668	985	395	4,635	5,384	1,269
1975	13,112	858	371	4,645	5,891	1,347
1976	13,997	662	438	5,182	6,194	1,521
Per cent change	+6.8	-22.8	+18.1	+11.6	+5.1	+12.9
1975 1st quarter	4,390	207	101	1,281	2,329	472
2nd quarter	2,798	200	91	1,078	1,119	310
3rd quarter	2,067	208	79	994	615	171
4th quarter	3,857	243	100	1,292	1,828	394
1976 1st quarter	4,765	240	108	1,443	2,403	571
2nd quarter	2,865	160	112	1,221	1,055	317
3rd quarter	2,149	129	99	1,066	686	169
4th quarter	4,218	133	119	1,452	2,050	464
1977 1st quarter p	4,633	118	128	1,414	2,412	561
Per cent change	-2.8	-50.8	+18.5	-2.0	+0.4	-1.8

^{1.} Public supply and transport power stations. 2. Public administration & commerce.

^{2.} Mainly naphtha (LDF), liquid petroleum gases and refinery gases.

Electricity

TABLE 9. Fuel used and electricity generated by the public supply system

	Fuel used						Electricity	y generated			194	Total ⁶
	Total ¹	Coal ²	Oil ^{2 3}	Natural gas	Nuclear electricity	Hydro electricity	Total ⁴	By steam	plant Other	Own ⁵ use	Electricity	
	Million to	ns of coal o	r coal equiv	ralent			TWh					
United Kingdom												
1973	114.68	75.57	28.04	1.13	8.22	1.66	258.80	23.66	229.89	18.43	240.37	244.76
1974	110.49	65.97	28.51	3.86	10.28	1.81	250.47	29.40	215.70	18.07	232.40	236.68
1975	108.97	73.39	21.14	3.37	9.29	1.64	251.26	26.52	219.69	18.02	233.24	237.30
1976	108.76	76.59	16.78	2.51	11.22	1.61	254.92	32.42	217.50	19.16	235.76	239.47
Per cent change	-0.2	+4.4	-20.6	-25.4	+20.8	-2.0	+1.5	+22.2	-1.0	+6.3	+1.1	+0.9
1976 Jan-Jun	56.71	39.59	9.12	1.56	5.36	1.05	132.90	15.53	114.41	9.71	123.19	125.13
1977 Jan-Jun p	59.13	42.02	8.86	0.62	6.63	0.97	138.64	18.96	116.90	10.24	128.40	130.05
Per cent change	+4.3	+6.1	-2.9	-60.3	+23.7	-7.6	+4.3	+22.1	+2.2	+5.5	+4.2	+3.9
1976 Apr	8.29	5.48	1.44	0.26	0.93	0.18	19.56	2.65	16.43	1.44	18.12	18.43
May	7.60	5.34	1.22	0.17	0.77	0.10	17.86	2.25	15.30	1.34	16.52	16.80
Jun*	8.30	6.06	1.07	0.18	0.87	0.12	19.42	2.55	16.52	1.50	17.92	18.17
Total	24.19	16.88	3.73	0.61	2.57	0.40	56.84	7.45	48.25	4.28	52.56	53.40
1977 Apr	8.77	6.33	1.27	_	1.02	0.15	20.59	2.92	17.24	1.49	19.10	19.37
May	7.94	5.70	1.10	0.08	0.91	0.14	18.68	2.59	15.71	1.37	17.31	17.53
Jun p*	8.78	6.15	1,33	0.16	1.05	0.08	20.63	3.01	17.28	1.63	19.00	19.29
Total	25.49	18.18	3.70	0.24	2.98	0.37	59.90	8.52	50.23	4.49	55.41	56.19
Per cent change	+5.4	+7.7	-0.8	-60.7	+16.0	-7.5	+5.4	+14.4	+4.1	+4.9	+5.4	+5.2
England and Wales						VF III						
1973	99.43	67.14	23.56	1.13	7.45	0.09	225.24	21.42	202.18	16.24	209.00	212.72
1974	96.09	58.63	24.00	3.86	9.43	0.12	218.85	26.93	190.43	15.89	202.96	205.55
1975	94.62	64.67	17.95	3.37	8.40	0.09	219.25	23,94	194.33	15.32	203.93	206.39
1976	94.29	67.97	13.84	2.51	9.84	0.08	222.12	28.30	193.11	15.94	206.18	207.62
Per cent change	-0.4	+5.1	-22.9	-25.4	+17.2	-11.4	+1.3	+18.2	-0.6	+4.0	+1.1	+0.6
1976 Jan-Jun	49.01	34.94	7.62	1.56	4.82	0.04	115.50	13.87	101.25	8.14	107.36	108.16
1977 Jan-Jun p	51.00	37.45	7.32	0.62	5.52	0.06	120.19	15.77	103.88	8.51	111.68	112.61
Per cent change	+4.1	+7.2	-3.9	-60.3	+14.5	+50.0	+4.1	+13.7	+2.6	+4.5	+4.0	+4.1
1976 Apr	7.16	4.83	1.22	0.26	0.84	0.01	17.04	2.38	14.60	1.22	15.82	15.92
May	6.58	4.69	1.03	0.17	0.69	-	15.58	2.02	13.53	1.14	14.44	14.56
Jun*	7.20	5.42	0.87	0.18	0.73	_	16.91	2.13	14.74	1.25	15.66	15.73
Total	20.94	14.94	3.12	0.61	2.26	0.01	49.53	6.53	42.87	3.61	45.92	46.21
1977 Apr	7.55	5.61	1.03	_	0.90	0.01	17.82	2.55	15.19	1.28	16.54	16.78
May	6.89	5.17	0.92	0.08	0.71	0.01	16.30	2.01	14.22	1.15	15.15	15.25
Jun p*	7.66	5.57	1.13	0.16	0.79	-	17.99	2.28	15.65	1.31	16.68	16.85
Total	22.10	16.35	3.08	0.24	2.40	0.02	52.11	6.84	45.06	3.74	48.37	48.88
Per cent change	+5.5	+9.4	-1.3	-60.7	+6.2	+54.5	+5.2	+4.7	+5.1	+3.6	+5.3	+5.8

^{1.} Including coke. 2. Including quantities used in the production of steam for sale. 3. Including oil used in gas turbine and diesel plant and for lighting up coal fired boilers. 4. Including generation by gas turbine, diesel and hydro-electric plant. 5. Used on works and for pumping at pumped storage stations. 6. Includes net imports and purchases from outside sources mainly UKAEA and British Nuclear Fuels Ltd. The England and Wales figures include net exchanges with Scotland.

TABLE 10. Sales of electricity by the public supply system

GWh

	Total	Iron and steel industry	Other industries	Domestic	Other ¹
1971	203,433	10,837	69,337	80,674	42,585
1972	210,417	10,774	68,967	86,889	43,787
1973	225,267	11,646	75,327	91,299	46,995
1974	218,552	11,292	70,967	92,626	43,667
1975	217,924	11,164	70,854	89,214	46,692
1976	220,841	12,607	74,986	85,117	48,131
Per cent change	+1.3	+12.9	+5.8	-4.6	+3.1
1075 4					
1975 1st quarter	66,040	3,103	18,601	30,511	13,825
2nd quarter	50,344	2,732	17,196	19,940	10,476
3rd quarter	42,042	2,407	16,219	14,218	9,198
4th quarter	59,498	2,922	18,838	24,545	13,193
1976 1st quarter	66,235	3,208	19,559	29,089	14,379
2nd quarter	48,537	3,071	17,910	17,148	10,408
3rd quarter	43,112	2,875	17,314	13,584	9,339
4th quarter	62,957	3,453	20,203	25,296	14,005
1977 1st quarter p	67,165	3,268	20,445	28,488	14,964
Per cent change	+1.4	+1.9	+4.5	-2.1	+4.1

^{1.} Mainly commerce, public administration & agriculture

	Crude Petro	leum						Petroleum	products		
	Gross ² Indigenous	Refinery R	eceipts							Net	
	Production	Total	Indigenous ²	Net arrivals	Other ³	Arrivals4,5	Shipments 4,5	Arrivals ⁴	Shipments ⁴	Arrivals	Bunkers ⁶
1973	373	114,032	235	+112,237	1,560	115,472	3,235	17,808	16,681	+1,127	5,499
1974	410	113,478	250	+111,418	1,810	112,822	1,404	14,256	14,396	-140	4,759
1975	1,564	92,273	1,156	+89,842	1,275	91,366	1,524	12,461	13,664	-1,203	3,444
1976	12,036	98,384	11,511	+86,181	692	90,466	4,285	10,422	15,726	-5,304	3,569
Per cent change	(+)	+6.6	(+)	-4.1	-45.7	-1.0	(+)	-16.4	+15.1	(+)	+3.2
1976 Jan-Jun	3,686	48,202	3,546	+44,010	646	45,176	1,166	6,106	7,050	-944	1,743
1977 Jan-Jun p	17,425	47,697	17,019	+30,470	208	37,705	7,235	5,880	7,096	-1,216	1,498
Per cent change	(+)	-1.0	(+)	-30.8	(-)	-16.5	(+)	-3.7	+0.6	(+)	-14.1
1976 Apr	646	8,495	619	+7,760	116	7,947	187	929	1,353	-424	270
May	767	8,494	769	+7,619	106	7,890	271	992	1,269	-277	298
Jun	944	7,767	921	+6,808	38	6,999	191	820	1,225	-405	271
Total	2,357	24,756	2,309	+22,187	260	22,836	649	2,741	3,847	-1,106	839
1977 Apr	2,921	7,612	2,947	+4,634	31	5,706	1,072	800	1,080	-280	240
May	3,495	8,786	3,751	+4,973	62	6,725	1,752	1,114	1,254	-140	266
Jun p	3,338	7,701	3,221	+4,411	69	5,974	1,563	911	1,135	-224	227
Total	9,754	24,099	9,919	+14,018	162	18,405	4,387	2,825	3,469	-644	733
Per cent change	(+)	-2.6	(+)	-36.8	-37.4	-19.4	(+)	+3.1	-9.8	(+)	-12.7

^{1.} Calendar months. 2. Including natural gas liquids (condensates). 3. Mainly recycled products. 4. Foreign trade as recorded by the Petroleum Industry and may differ from figures published in Overseas Trade Statistics. 5. Including process (partly refined) oils. 6. International bunkers.

TABLE 12. Refinery throughput and output of petroleum products¹

Thousand tonnes

	Through- put of crude		Refinery use Total outpu		Gases				Kerosene					
	and process oils	Fuel		of petrol- eum pro- ducts ²	Butane and propane	Other petro- leum	Naphtha (LDF)	Motor	Aviation turbine fuel	Burning oil ³	Gas/ diesel oil	Fuel	Lubri- cating oils	Bitumen
1973	114,338	7,053	1,331	105,954	1,655	394	6,607	14,842	4,550	2,717	27,853	42,026	1,477	2,225
1974	111,217	6,946	1,211	103,060	1,602	272	6,448	14,520	4,475	2,564	27,641	40,022	1,455	2,129
1975	93,579	6,031	901	86,647	1,447	151	3,968	13,940	3,959	2,299	23,324	32,711	1,141	2,099
1976	97,784	6,342	1,158	90,284	1,575	158	4,583	15,232	4,163	2,458	24,198	32,696	1,310	1,897
Per cent change	+4.5	+5.2	+28.5	+4.2	+8.8	+4.4	+15.5	+9.3	+5.2	+6.9	+3.7	-0.0	+14.8	-9.6
1976 Jan-Jun	48,573	3,172	555	44,846	799	79	2,310	7,312	1,979	1,311	12,388	15,954	615	993
1977 Jan-Jun p	47,868	3,035	590	44,243	744	68	2,284	7,224	1,939	1,261	12,141	16,128	672	908
Per cent change	-1.5	-4.3	+6.4	-1.3	-6.9	-14.3	-1.1	-1.2	-2.0	-3.9	-2.0	+1.1	+9.3	-8.6
1976 Apr	8,291	535	74	7,682	137	11	373	1,232	333	220	2,132	2,784	104	158
May	8,051	503	118	7,430	119	10	311	1,272	341	139	2,082	2,677	87	196
Jun	7,953	505	111	7,337	106	12	405	1,294	365	146	1,923	2,607	99	180
Total	24,295	1,543	303	22,449	362	33	1,089	3,798	1,039	505	6,137	8,068	290	534
1977 Apr	8,066	497	115	7,454	130	16	352	1,266	346	201	2,044	2,676	99	156
May	7,766	518	98	7,150	110	10	366	1,231	380	164	2,003	2,478	106	169
Jun p	7,501	500	113	6,888	103	7	403	1,186	417	122	1,922	2,294	129	183
Total	23,333	1,515	326	21,492	343	33	1,121	3,683	1,143	487	5,969	7,448	334	508
Per cent change	-4.0	-1.9	+7.6	-4.3	-5.4	+2.4	+2.9	-3.0	+9.8	-3.5	-2.7	-7.7	+15.1	-4.9

^{1.} Calendar months. 2. Including output of products not shown separately, namely, aviation spirit, wide-cut gasoline, industrial and white spirits, paraffin wax and miscellaneous products. 3. Including vaporising oil.

TABLE 13. Deliveries of petroleum products for inland consumption¹

Thousand tonnes

					Kerosene	Kerosene							
						Burning	oil		Gas/diesel oil				
		Butane ⁴	Naphtha	Motor	Aviation turbine		Standard		Derv		Fuel	Lubri- cating	
	Total ^{2, 3}	propane	(LDF)5	spirit	fuel	Premier	Domestic	Other ⁶	fuel	Other	oil	oils	Bitumen
1973	99,344	1,600	8,373	16,927	4,202	788	1,931	501	5,658	15,100	39,447	1,185	2,458
1974	92,342	1,414	7,700	16,484	3,690	603	1,770	436	5,518	13,581	36,810	1,045	2,241
1975	81,667	1,275	5,116	16,125	3,834	538	1,707	400	5,414	13,050	30,470	992	2,089
1976	80,291	1 330	5,404	16,879	3,989	576	1,686	372	5,594	12,984	27,825	1,011	1,867
Per cent change	-1.7	+4.3	+5.6	+4.7	+4.0	+7.1	-1.3	-7.2	+3.3	-0.5	-8.7	+1.9	-10.6
1976 Jan-Jun	41,405	681	2,675	8,108	1,904	316	926	197	2,773	7,039	14,932	485	978
1977 Jan-Jun p	41,942	705	2,721	8,221	1,964	332	945	203	2,821	7,536	14,573	528	890
Per cent change	+1.3	+3.5	+1.7	+1.4	+3.1	+5.3	+2.0	+3.2	+1.7	+7.1	-2.4	+8.8	-9.0
1976 Apr	7,050	111	509	1,461	306	43	154	32	478	1,174	2,478	84	154
May	6,017	102	397	1,363	350	17	95	26	445	870	2,051	82	169
Jun	5,819	99	367	1,476	362	9	90	24	476	729	1,856	86	190
Total	18,886	312	1,273	4,300	1,018	69	339	82	1,399	2,773	6,385	252	513
1977 Apr	6,865	117	429	1,419	274	55	175	35	474	1,287	2,286	81	138
May	6,562	107	467	1,417	399	27	107	29	483	1,025	2,161	95	175
Jun p	5,948	95	439	1,461	393	10	75	21	461	745	1,922	92	170
Total	19,375	319	1,335	4,297	1,066	92	357	85	1,418	3,057	6,369	268	483
Per cent change	+2.6	+2.2	+4.9	-0.1	+4.8	+35.6	+5.1	+4.3	+1.3	+10.2	-0.2	+6.4	-6.0

^{1.} Calendar months. 2. Including other petroleum gases, aviation spirit, wide-cut gasoline, industrial & white spirits, and paraffin wax.

^{3.} Excluding refinery fuel and miscellaneous products. 4. Including very small amounts for petro-chemicals. 5. Now mainly for petrochemical feedstock.

^{6.} Including vaporising oil.

D 2N	Total	Power ³ Stations	Gas Works	Iron and steel industry	Other Industries	Transport ⁴	Domestic	Other ⁵
1973	88,196	16,993	2,355	4,995	22,045	28,971	3,812	9,025
1974	81,547	17,240	1,339	4,019	19,695	27,930	3,378	7,946
1975	73,385	13,345	693	3,309	17,251	27,582	3,270	7,935
1976	71,473	10,441	366	3,128	17,487	28,599	3,269	8,183
Per cent change	-2.6	-21.8	-47.3	-5.5	+1.4	+3.7	-0.0	+3.1
1976 Jan-May	31,893	4,910	214	1,378	8,197	11,325	1,652	4,217
1977 Jan-May p	32,204	4,564	134	1,332	8,415	11,607	1,700	4,452
Per cent change	+1.0	-7.0	-37.1	-3.4	+2.7	+2.5	+2.9	+5.6
1976 Mar	7,185	1,147	46	317	1,855	2,376	416	1,028
Apr	6,273	920	51	276	1,526	2,431	290	779
May	5,330	743	17	239	1,291	2,331	172	537
Total	18,788	2,810	114	832	4,672	7,138	878	2,344
1977 Mar	6,890	898	32	283	1,810	2,531	370	966
Apr	6,133	777	19	232	1,578	2,347	329	851
May p	5,766	774	17	243	1,396	2,475	201	660
Total	18,789	2,449	68	758	4,784	7,353	900	2,477
Per cent change	+0.0	-12.8	-40.0	-8.7	+2.4	+3.0	+2.4	+5.6

^{1.} Calendar months. 2. Excludes non-energy products and non-energy use of naphtha (LDF).

TABLE 15. Stocks of petroleum at end of month

	Held by oil comp	Power stations		
	Million tonnes	Estimated days' supply 3	Million tonnes	
1976 May	20.2	105	0.83	
Jun	20.8	105	0.89	
Jul	21.1	101	1.00	
1977 May	19.6	100	0.77	
Jun	20.2	100	0.82	
Jul p	20.1	93	0.87	

^{1.} Stocks of petroleum products plus the product equivalent of crude and process oils held at refineries, and products in the wholesale distribution system. 2. Fuel oil held at main oil burning stations in Great Britain.

APPROXIMATE CONVERSION FACTORS

(last digit rounded to nought or five)

To convert from one fuel to another, multiply by the factor shown

To From	Million tons coal equiv.	Million tonnes oil equiv.	Million	TWh Electrical energy	TWh Electricity generated
Million tons coal equivalent	1	1.65	0.00390	0.135	0.500 ²
Million tonnes oil equivalent	0.600	1	0.00235	0.0800	0.280 ²
Million therms	255	425	1	34.0	115
TWh Electrical energy	7.45	12.5	0.0295	1	
TWh Electricity generated	2.003	3.603	0.00880 ³		1

- 1. The amount of fuel (average grade) equivalent to 1 TWh of energy.
- 2. The amount of primary fuel (power station grade) to generate 1 TWh.
- 3. The amount of electricity generated by one million units of the fuel shown.
- The Digest of UK Energy Statistics 1976 gives more detailed factors.

SUPPLEMENTARY DATA

Value of fuel imports and exports (1)

£ million

				Imports		Exports (f.o.b.)						
	Coal	Other	Natural	Petroleum					Other	3		
		solid fuel ²	gas	Crude	Refined 3	Electricity	Total	Coal	fuel ²	Petroleum	Electricity	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1971	39.2	8.2	10.4	955.7	232.7	0.4	1,246.6	13.2	11.6	211.5	_	236.3
1972	48.9	11.3	9.4	947.0	223.2	1.7	1,241.5	9.7	9.2	219.7	_	238.6
1973	21.3	7.9	9.4	1,336.3	348.3	0.4	1,723.6	15.2	13.8	341.0	_	370.0
1974	62.1	7.2	8.1	3,856.3	701.9	0.4	4,636.0	20.8	46.9	701.0	-	768.7
1975	105.6	7.8	13.9	3,462.9	718.6	1.1	4,309.9	36.1	54.6	722.9	0.1	813.7
1976	82.7	9.0	20.3	4,585.8	954.1	-	5,651.9	30.6	47.7	1,175.4	1.1	1,254.8
Per cent change	-21.7	+16.1	+46.1	+32.4	+32.8	(-)	+31.1	-15.0	-12.7	+62.6	(+)	+54.2
1075 2nd museter	27.0	1.0	2.5	0240	144.0	0.1	1 010 2	8.7	13.0	151.9	0.1	173.7
1975 2nd quarter	27.0	1.8	2.5	834.8	144.0	0.1	1,010.2	6.3				
3rd quarter 4th quarter	23.7 30.0	2.1	3.5 4.0	847.8 905.8	156.9 230.1	_	1,034.0 1,172.1	8.1	9.9	197.9 204.1	_	214.1 224.7
1976 1st quarter	19.7	2.3	6.2	1,096.7	244.4	_	1,369.3	6.5	11.8	222.9	_	241.2
2nd quarter	25.6	1.8	4.4	1,107.3	247.8		1,386.9	6.0	11.6	247.2	0.3	265.1
3rd quarter	18.7	2.7	5.2	1,143.5	230.3	-	1,400.4	8.5	11.4	324.6	0.1	344.6
4th quarter	18.7	2.2	4.5	1,238.3	231.6	-	1,495.3	9.6	12.9	380.7	0.7	403.9
1977 1st quarter	15.3	2.3	3.4	1,173.1	254.1	-	1,448.2	11.3	13.8	454.9	_	480.0
2nd quarter	14.4	3.2	3.8	1,099.4	263.9	-	1,384.7	11.3	12.1	498.2	-	521.6
Per cent change	-43.8	+73.9	-14.5	-0.7	+6.5	_	-0.2	(+)	+4.4	(+)	_	(+)

^{1.} The figures correspond to those published in Section 3 of the "Overseas Trade Statistics".

^{3.} Public supply, railway and transport power stations. 4. Including fishing, coastal and inland shipping.

^{5.} Mainly public administration, commerce and agriculture.

^{3.} Latest three months calculated on forecast deliveries for the ensuing months. Figures for earlier period calculated on actual deliveries.

^{2.} Including coke, breeze, briquettes and pitch. 3. Including liquefied gases other than natural gas and petroleum products is not used as fuel e.g., lubricants.